UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

Reply To
Attn of: OWW-135

JAN 1 5 2008

D. Robert Lohn
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northwest Region
7600 Sand Point Way, N.E.
Building 1
Seattle, WA 98115

Dear Mr. Lohn:

The U. S. Environmental Protection Agency (EPA) would like to take this opportunity to share with you information about activities we have currently underway, or planned, that relate to the Federal Columbia River Power System Biological Opinion (Draft Remand). EPA believes that water quality improvements under the Clean Water Act are essential to Columbia River Basin salmon recovery.

Our review of the Draft Remand showed 20 Reasonable and Prudent Alternatives (RPAs) directly connected to water quality improvements, representing a significant accomplishment and acknowledgement of the role of water quality in salmon restoration and recovery. Discussed below are several activities we believe complement or otherwise support this important work.

Section 7 Consultation

NOAA and EPA staff are working closely together on a number of important Section 7 consultations related to water quality and salmon recovery in Idaho, Oregon, and Washington. In one of those consultations, for example, we are preparing 4300 detailed analyses of potential chemical effects on endangered species, in association with our approval action for the Oregon water quality standards. In another extensive consultation, we are working with your staff to ensure that the water quality standards for temperature in rivers throughout the State of Washington are optimal for salmon. As you know, we completed a similar consultation with your staff related to temperature standards in Oregon. It is clear to us through these intensive consultation activities that water temperature continues to be a subject of significant mutual interest for our two agencies.

Tributary Habitat Restoration

EPA is encouraged by the commitment to tributary restoration demonstrated in the Draft Remand. According to our review, EPA identified RPA 34, 35, 56, and 57 as addressing tributary habitat restoration. EPA is directly involved in a large number of work efforts, including TMDL development, review and implementation; federal, state and private forest best management practices; watershed grant program funding; technical assistance and other efforts which support tributary habitat restoration through water quality improvements; and wetland and habitat restoration and protection efforts. As a contribution to NOAA Fisheries tributary habitat restoration work efforts, EPA is prepared to commit to prioritize our work efforts in three Columbia River Basin tributaries to enhance salmon recovery. We will work together with our state and tribal partners to identify these priority tributaries, and we welcome input from NOAA Fisheries as well.

Toxic Chemicals and Salmon Recovery

In 2006, EPA designated the Columbia River as a priority Large Aquatic Ecosystem in EPA's 2006-2011 Strategic Plan with a focus on reducing toxics. As a result of the increased attention, we have established numeric environmental targets we will need to reach by 2011. These targets include wetland restoration, sediment clean up and reduction of toxic chemical concentrations in fish and water. All these efforts are important for Columbia River Basin salmon restoration.

We are launching a number of collaborative efforts around the basin to achieve those numeric targets, in addition to our major ongoing clean up efforts underway at Hanford, Portland Harbor and Lake Roosevelt. Examples of collaborative efforts include pesticide stewardship partnerships with agriculture, legacy pesticide collection events, and financial support for precision agriculture technologies. We are currently developing a *State of the River Report* for the Columbia River Basin to characterize and assess toxic chemical problems, work efforts, monitoring needs and toxic reduction needs in the Columbia River Basin.

Research from the NOAA Science Center and others has shown that toxic chemicals found in the Columbia River including PCBs, DDT, PAHs, pesticides, and flame retardants, can impair juvenile salmon growth and development, affect immune function, act as hormone disruptors and reduce reproductive success, even at low concentrations. Toxics can also alter salmon sensory abilities (particularly smell) and behavior, making it difficult for juveniles to swim, feed, avoid predators, and navigate their migratory path.

EPA believes that toxic contamination is a significant habitat issue in the Columbia River, and that salmon recovery will be enhanced by reducing toxic chemical concentrations in fish, water and sediment in the Columbia River Basin. There is much that is not understood about distribution, concentration, sources of toxic contamination and how juvenile salmon and other species are exposed to toxics. We look forward to working with NOAA and other agencies and interested parties toward developing answers for these questions.

Columbia River Estuary

EPA recognizes the important role of the Columbia River estuary in restoring Columbia River salmon stocks. According to our review of the Draft Remand, the Columbia River Estuary is addressed in RPA 36, 37, 38, 58, 59, and 60. The Lower Columbia River was designated by EPA an estuary of "national significance" as a part of EPA's National Estuary Program in 1996. As a part of that designation, the Lower Columbia River Estuary Partnership (LCREP) developed an estuary management plan in 1999 and has convened a group of national expert scientists to help in restoring the Columbia River Estuary. LCREP has demonstrated regional leadership in estuary monitoring and habitat restoration. We encourage you to work with LCREP as you develop and implement assessment, monitoring and habitat restoration recovery efforts.

Columbia/Snake River Mainstem Temperature Total Maximum Daily Load (TMDL)

EPA remains responsible for completing the Columbia/Snake Mainstem temperature TMDL. We believe this work effort is important to Columbia River Basin habitat protection and restoration. We also want to ensure NOAA Fisheries and our other federal partners that our work on the Columbia/Snake Mainstem TMDL will complement the analysis and agreements forged in the development of the Draft Remand and the Final Biological Opinion.

EPA, the Corps and the Bureau, are engaged in ongoing discussions on technical and policy issues related to the TMDL. RPA 15 identifies the expansion of water temperature modeling capabilities from Grand Coulee to Bonneville Dam to address summer temperature on the Columbia River. We are encouraged by this related proposed action and we look forward to coordinating these work efforts.

Water Temperature

Finally, EPA Region 10 has a long-standing commitment to addressing water quality problems related to temperature. In 2003, working with our state and tribal partners and with NOAA and other agencies, we established our regional temperature guidance. We are engaged in a variety of regulatory activities under the Clean Water Act to directly address temperature problems, such as such as setting TMDLs and point source permitting. Oregon and Washington have now adopted water quality standards consistent with our temperature guidance. As mentioned above, we approved the Oregon standards in 2004, and we are moving towards taking action on the Washington standards. Oregon and Washington have developed hundreds of temperature TMDLs in the Columbia River Basin, including TMDLs for the Grande Ronde, Umatilla, Walla Walla, Wenatchee, Wind, and Willamette Rivers and the Hells Canyon reach on the Snake River. All of these activities are intended to improve river temperatures and reduce the adverse effects to salmon that currently occur in these rivers.

The Draft Remand calls for continued operation of cold water releases from Dworshak dam to maintain temperatures at or below 68°F at the Lower Granite Dam (RPA 4). EPA strongly supports this measure. Dworshak cold water releases have significantly reduced summer temperatures in the Lower Granite Reservoir, which benefit both juvenile and adult salmon. The fish to redd ratio for Fall Chinook salmon above Lower Granite dam has improved since the onset of Dworshak cold water releases from 24.0 for the 1986–1992 period to and 3.2 for the 1993-2006 periods. We believe

these data suggest that pre-spawning adult mortality has been significantly reduced due to the Dworshak cold water releases.

The Draft Remand also includes the continued update and implementation of the Action Agencies' Water Quality Plan for Total Dissolved Gas and Temperature in the Mainstem Columbia and Snake Rivers (RPA 15). EPA strongly supports the inclusion of this RPA.

Within the latest version of the Water Quality Plan, there are several potential actions identified to lower water temperatures that we believe deserve further investigation and analysis. For example, the Plan identifies cool water releases and/or operational changes from the Hells Canyon Complex and Grand Coulee Dam as potential actions to lower water temperature during critical timeframes. We believe these actions should be further assessed. Additionally, options to reduce water temperatures immediately upstream of the dams and methods to protect and create areas of cold water refugia along the migratory corridor should be further explored. These activities are also identified in the Plan.

We understand uncertainties remain regarding the benefits and feasibility of many of the options related to water temperature in the Plan, including those listed above. I would like to invite NOAA Fisheries to work with EPA and others in a regional dialogue to help assess these options and reach a better regional understanding on water temperature in the Columbia and Snake Rivers. To provide leadership for this regional dialogue, I would like to invite you to a meeting with me and my staff in late March where we will be prepared to share technical information with you on these issues. A regional dialogue can support decision making on feasibility for the implementation of the Water Quality Plan.

In conclusion, EPA recognizes the major investment and commitments by NOAA Fisheries embodied in the Draft Remand. EPA is likewise engaged in a number of activities relevant to salmon recovery, under our Clean Water Act mandates. We believe our activities are strongly supportive of our mutual responsibilities for salmon recovery, and we look forward to working with you on a regional dialogue to address water temperature technical and policy questions. Please do not hesitate to contact me at (206) 553-1234, if you wish to discuss these issues further. Your staff may wish to contact Michael F. Gearheard, Director of Water and Watersheds, at (206) 553-7151.

Sincerely,

Elin D. Miller
Regional Administrator